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# Water Supply Outlook For

Nevada

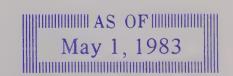




SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

NEVADA DEPARTMENT of CONSERVATION AND NATURAL RESOURCES DIVISION OF WATER RESOURCES



#### TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir-storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

## COVER PHOTO: FRESH POWDER SNOW ON ELEPHANT MOUNTAIN, NEAR WEST FORK OF HYALITE CREEK, MONTANA

Published by Soil Conservation Service

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

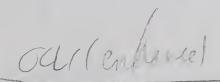
STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
	/6/2

#### PUBLISHED BY OTHER AGENCIES

P. O. Box 2440, Casper, Wyoming 82602

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.

Wyoming



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## WATER SUPPLY OUTLOOK

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# WATER SUPPLY OUTLOOK FOR NEVADA

AND

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS



Issued by

PETER C. MYERS
CHIEF
SOIL CONSERVATION SERVICE
WASHINGTON D.C.



GERALD THOLA
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
RENO, NEVADA

In Cooperation with

ROLAND D. WESTERGARD
DIRECTOR
DEPARTMENT OF CONSERVATION AND
NATURAL RESOURCES
CARSON CITY, NEVADA



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# For Further Information Please Contact The Soil Conservation Service in

Battle Mountain, Nevada Highway 8A, Lemaire Road Phone: 702-635-2650

Caliente, Nevada 360 Lincoln Street Phone: 702-726-3101

Cedarville, California USDA Building Phone: 916-276-6110

Elko, Nevada Post Office Building Phone: 702-738-8431

Ely, Nevada 1190 Avenue E Phone: 702-289-4065

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111 Sheckler Road
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Lovelock, Nevada 1055 Cornell Street Phone: 702-273-2134

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Tonopah, Nevada 170 Mineral Street North Phone: 702-482-3942

Winnemucca, Nevada 1200 Winnemucca Blvd., East Phone: 702-623-2265

Yerington, Nevada 215 West Bridge Street Phone: 702-463-2265

#### Report Prepared by

THE SNOW SURVEY AND WATER SUPPLY FORECAST UNIT
James K. Marron, Snow Survey Supervisor
Nancy Gordon, Hydrologist
Jon P. Lea, Hydrologist
Soil Conservation Service
P.O. Box 4850
Reno, Nevada

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All average are for 1963-1977 period.



#### WATER SUPPLY OUTLOOK

#### FOR NEVADA

\* The Winter of 1983 has been a season of records. The May first
\* snow surveys have indicated that 33 measurement sites set record
\* water contents. The extremely large snowpack will provide plen-

tiful water supplies, but difficulties may arise in handling the streamflows as the snowpack begins to melt.

Reservoirs have been drawn down as far as possible to allow for \* management of streamflows. Rye Patch, Topaz, Bridgeport, Boca, and \* Lake Tahoe have all been drawn down the past month. Stampede and \* Wildhorse Reservoirs are presently flowing over their spillways. \*

#### SIERRA EAST SLOPE

Storms crossing the Sierra during May have significantly increased water contents at high elevations and maintained below average temperatures. The below average temperatures caused the lower elevation snow to melt at a much slow rate than usual.

Fourteen sites along the East Slope of the Sierra have set all time water content records. Six of these record measurements were made in the Lake Tahoe Basin, and virtually all of the measurements surpassed their previous May first records. Marlette Lake, which surpassed its all time maximum water content at the April survey, set a new maximum water content with the May 1 survey. The previous maximum water content at Marlette Lake was measured in 1969 at 45.5 inches of water. The new record taken April 26th was 48.2 inches water content. The Truckee Basin had four all time record measurements. Squaw Valley #2, located on a ridge to the south and west of the well know KT22 in the Squaw Valley Ski Area, measured 229 inches of depth and 104.2 inches water content. The previous record was measured in 1969 at 184 inches depth and 84.0 inches water content. In the Carson Basin, four sites measured all time record water content.

Reservoir management during April has been difficult with reservoir operators attempting to obtain sufficient storage to manage the flows expected when snowmelt reaches its maximum rate. Topaz, Bridgeport, Lahontan, Boca, and Lake Tahoe have been drawn down 121,000 acre feet and should help to manage the approximately 1.5 million acre feet expected from the drainages along the Sierra.

Streamflows will be high, with the Truckee River forecast at 214 percent of average, the Carson River at 237 percent of average, the West Walker 205 percent of average, and the East Walker at 250 percent of average. Pyramid Lake has increased 7.67 feet since October 1, 1982 and is expected to rise a minimum of 4.5 more feet with a most probable rise at 7.5 feet.

#### HUMBOLDT BASIN

Snow measurements taken in the Humboldt Basin indicate a 206 percent of average snowpack. Dorsey Basin and Green Mountain have both reached maximum water contents for May first.

Snowmelt has been proceeding at a slower than normal rate, but many of the lower elevation sites have melted out completely.

Streamflow has already been significant with the Humboldt River, above Elko, leaving its banks several times. Excessive flows have been confined mainly to pastureland. The Humboldt is forecast at 226 percent of average and water supplies will be excellent, providing sufficient irrigation water late in the year.

Rye Patch Reservoir contents remained the same as last month. Significant flow has reached the Humboldt Sink causing some problems with spreading water.

#### OWYHEE AND SNAKE BASINS

Snowpacks in the Owyhee and Snake Basins are 185 percent and 145 percent of average, respectively, and will supply water for irrigation well into the irrigation season.

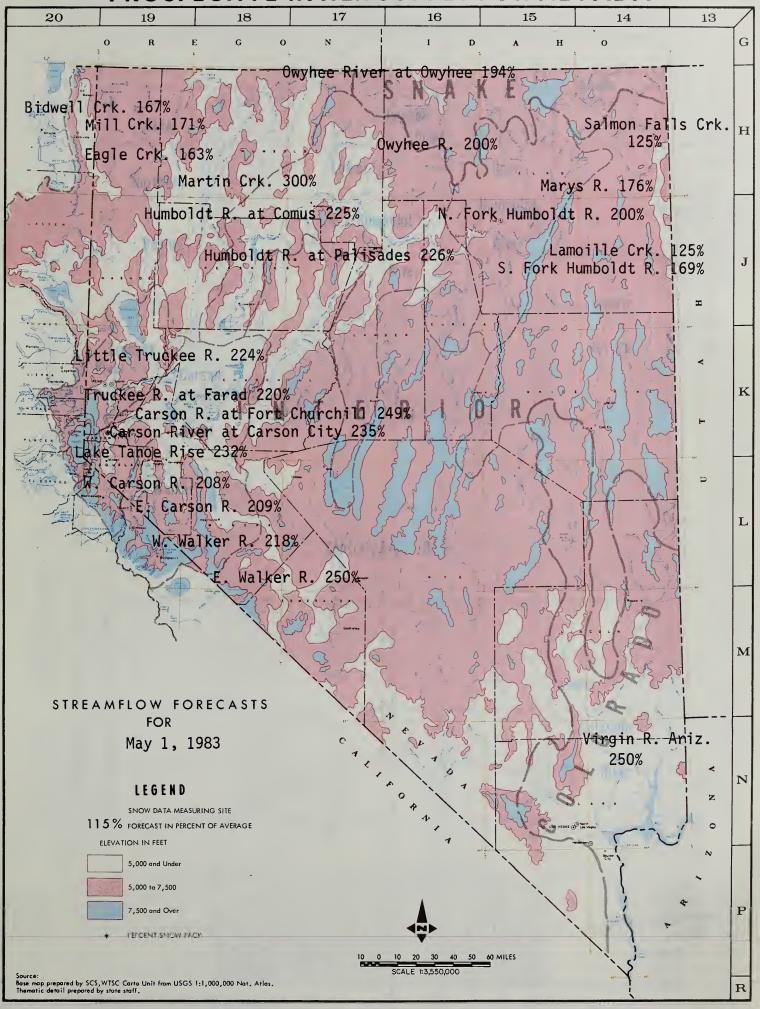
Wildhorse Reservoir is full. Streamflows into the reservoir are forecast at 45,000 acre feet. The spillway began flowing on April 21st and discharge has reached 786 cubic feet per second. Runoff has just begun and should not reach its maximum until the first or second week in June. This indicates that flows will not receed below the current levels until well into June.

#### SURPRISE VALLEY

Cedar Pass snow course is 178 percent of average and 199 percent of last year.

Streamflow in the Surprise Valley will be excellent with the availability of irrigation water late in the season. Forecasts range from 163 percent of average on Eagle Creek to 171 percent of average on Mill Creek.

#### PROSPECTIVE WATER SUPPLY FOR NEVADA



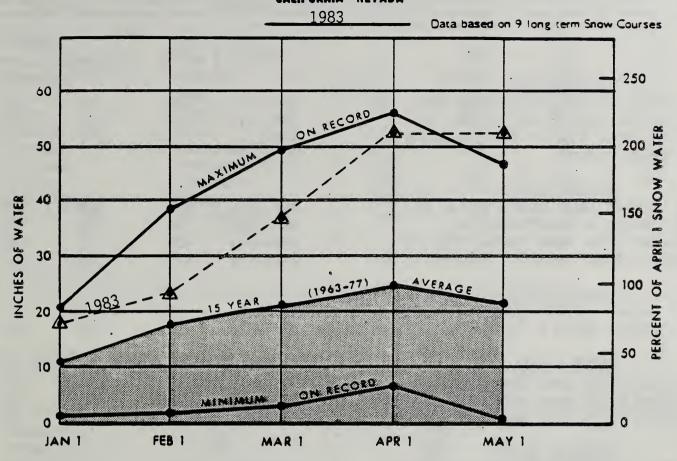
#### INDEX TO NEVADA SNOW COURSES

(By Basins)

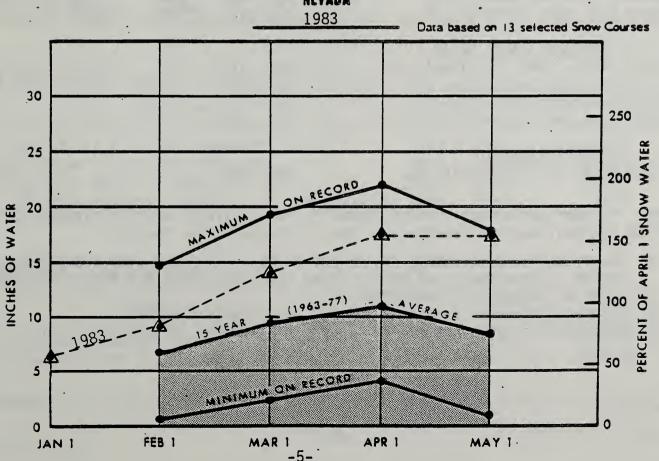
Refer to the  $\mbox{\it map}$  on the preceeding page for Snow Course locations.

NUMBER	NAME	SEC. TI	NP. RGE.	ELEV.	4	NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
HONDER	SNAKE RIVER					LAKE TA		320.		NGE.	
SNAKE RI 15H01SA 15H02 15H13SA 15H15A 15H15A 15H20a 15H14S 15H18a 15H03SA 15H19a	VER  Bear Creek Fox Creek Goat Creek Hummingbird Springs Merritt Mountain Pole Creek Ranger Station Red Point Seventy Six Creek S tag Mountain	31 4: 33 4: 31 4: 6 4 10 4: 13 4: 15 4: 6 4	6N 58E 6M 58E 6N 60E 5R 60E 6N 54E 6N 59E 6N 59E 1N 58E	7800 6800 8800 8945 7000 8330 7940 7100 7800		20L06S 20L05 20L10S 19L02 19K06 19L03S 19L24S 20L04 19K04S 20L03 20L01 20L02S 20K16	Echo Peak (CA) Echo Summit (CA) Fallen Leaf (CA) Freel Bench (CA) Glenbrook #2 Hagan's Meadow (CA) Heavenly Valley (CA) Lake Lucille (CA) Marlette Lake Richardsons #2 (CA) Rubicon #1 (CA) Rubicon #2 (CA) Tahoe City (CA)	35 6 3 36 13 36 1 28 18 6 6	12N 11N 13N 12N 14N 12N 12N 12N 15N 12N 13N 13N	17E 18E 17E 18E 18E 18E 17E 19E 18E 17E 17E	7800 7450 6300 7300 6900 8000 8850 8200 8000 6500 8100 7500 6250
15H04S 15H06a	Big Bend Columbia Basin	31 4	5N 56E 4N 53E	6700 6650		20K27S 19L01	Tahoe City Cross (CA) Upper Truckee (CA)	1 21	15N 12N	16E 18E	6750 6400
16H09a 16H17S 15H05 16H01 16H02A 16H09S 16H04S 16H05S 17G04a 15H09S	Fawn Creek Fawn Creek #2 Gold Creek Jack Creek, Lower Jack Creek, Upper Jack Creek #2, Upper Jacks Peak Laurel Oraw Louse Canyon (OR) Taylor Canyon	2 44 32 44 18 45 9 46 21 46 20 44 27 44 35 36	5N 52E 5N 52E 5N 56E 2N 53E 2N 53E 2N 53E 2N 53E 5N 53E 0S 44E 9N 53E	7090 7050 6690 6300 7250 7250 8420 6790 6440 6200		20K17 20K25S TRUCKEE 20K14 20K22 20K28 20K21 20K10 20K07* 20K07*	Ward Creek #2 (CA) Ward Creek #3 (CA)  RÍVER  Boca #2 (CA) Brockway Summit (CA) Castle Creek (CA) Donner Park #2 (CA) Donner Summit (CA) Fordyce Lake (CA) Furnace Flat (CA)	21 21 28 3 23 18 25 34	15N 15N 18N 17N 17N 17N 17N 18N 17N	16E 16E 17E 16E 14E 14E 13E 13E	7000 6750 5900 7100 7400 6000 6500 6700
UPPER H	JMBOLDT RIVER	`				20K04S 20K03S	Independence Camp (CA) Independence Creek (CA)	34 14	19N 19N	15E 15E	7000 6500
15J17a 15J12SA 15J01S 15J03 15H07P 15J09S 15J10 15J11 15J04 15J06S 15J08 15J08	American Beauty Corral Canyon Dorsey Basin Dry Creek Fry Canyon Green Nountain Harrison Pass #1 Harrison Pass #2 Lamoille #1 Lamoille #3 Lamoille #3 Lamoille #5 Pole Canyon #2	27 28 33 5 33 1 4.23 2.24 3.3 1 5 3.3 24 3.3 3.3 3.3	1 N 58E 8N 57E 5N 60E 4N 60E 33N 54E 9N 57E 8N 57E 2N 58E 2N 58E 2N 59E 4N 61E	7800 8500 8100 6500 6790 8000 7400 7100 7700 8700 7700		20K05S 19K03 20K02S 19K07S 20K06 20K19 20K30S 20K13S 20K02* 20K01*	Independence Lake (CA) Little Valley Mt. Rose Mt. Rose Ski Area Sage Hen Creek (CA) Squaw Valley #2 (CA) Squaw Valley Gold Coast (CA) Truckee #2 (CA) Webber Lake (CA) Webber Peak (CA)	9 17 7 30 7 6 36 22 29 30	18N 16N 17N 17N 18N 15N 16N 17N 19N	15E 19E 19E 19E 16E 16E 15E 16E 14E	8450 6300 9000 9000 6500 7500 8200 6400 7000 8000
15J16a 15H06P 15J02 15J19 15J22a 15J23a 15H08 15H10P 15H11A	Robinson Lake Rodeo Flat Ryan Ranch Smith Creek Tent Mountain, Lower Tent Mountain, Upper Tremewan Ranch Trout Creek, Lower Trout Creek, Upper JMBOLDT RIVER	23 3. 36 4. 1 3. 26 3. 26 3. 35 3. 9 3. 28 3	3N 59E 3N 53E 4N 59E 0N 57E 6N 60E 6N 60E 9N 55E 7N 61E 6N 61E	9200 6800 5800 7600 7000 8350 5700 6900 8500		19L05S 19L04 19K05 19L19A 19L32S 19L16a 19L16a 19L16a 19L06SA 19L39S 19L31S	Blue Lakes (CA) Carson Pass, Upper (CA) Clear Creek Ebbetts Pass (CA) Ebbetts Pass #2 (CA) Fish Valley, Upper (CA) Monitor Pass (CA) Fish Valley, Upper (CA) Poison Flat (CA) Spratt Creek (CA)	30 22 6 17 17 1 31 1 25	9N 10N 14N 8N 8N 7N 9N 7N 8N 10N	19E 18E 19E 20E 20E 21E 22E 21E 22E 21E	8000 8600 7300 8700 8700 8050 8350 8050 7900 6100 8100
17K01 17K02	8ig Creek Campground Big Creek Mine		7N 43E 7N 43E	6600 7600		19L18a 19L20a	Wet Meadows #2 (CA) Wet Meadows Lake (CA) Wolf Creek (CA)	26 26 35	9N 8N	19E 19E 20E	8050 8000
17K04S 17K03 17H02AS 17H01A 17L01 17L02 17J02 17H04SA 17H03SA 17H03SA 16H03AP 16H07a	Big Creek Summit Big Creek, Upper Buckskin, Lower Buckskin, Upper Corral, Lower Corral, Upper Golconda #2 Granite Peak Lamance Creek Martin Creek Midas Toe Jam	35 1 26 1 25 4 11 4 12 1 20 1 22 3 22 4 13 4 13 4 18 3	771 43E 77N 43N 55N 39E 55N 39E 11N 40E 11N 41E 55N 39E 44N 39E 24N 38E 44N 38E 44N 38E 60N 50E	8700 7800 6700 8200 7500 8000 6000 7800 6000 6700 7200 7700		WALKER 19L11 19L10 19L12 19L30A 19L08S 19L38 19L17SA 19L34 19L07 19L23S		20 15 4 4 13 4 20 17 1	4 N 4 N 3 N 3 N 5 N 5 N 7 N 3 N 5 N	23E 23E 23E 23E 21E 22E 24E 24E 21E 22E	8500 7900 9400 9400 9400 7200 9200 8750 8800 8800
EASTERN						19M01* 19L13 19L22S	Tioga Pass (CA) Virginia Lakes (CA) Virginia Lakes Ridge (CA)	30 5	1 N 2 N	25E 25E	9900 9500
14L01 14L02 14L03 14K02SA 14K01 14K09a 15J15SA 14K08 14K03 15K01 14K07	8aker =1 Baker #2 Baker #3 Berry Creek Bird Creek O efiance Mines Hole-in-Mountain Kalamazoo Creek Murray Summit Robinson Summit Silver Creek #2	30 1 25 1 26 1 34 1 9 1 6 3 34 2 25 1 34 1	3N 69E 3N 69E 3N 68E 7N 65E 9N 65E 4N 63N 5N 61E 0N 65E 6N 62E 8N 61E 6N 69E	7950 8950 9250 9100 7500 9200 7900 7400 7250 7600 8000		19L09	Willow Flat (CA)  COLORADO COLORADO CONTENTA CONT	14 35 26 9	2N 5N	25E 23E 58E 67E 56E 56E	9200 8250 8720 7050 8200 9000
14K05SA	Ward Mountain #2		5N 62E	9200		14M01a 14L04a	Lee Canyon #3 Mathew Canyon Mt. Wilson	10 10 27	19S 5S 5N	56E 70E 68E	8500 6000 8050
18M02 18M05a 15N02 18M01a 18M03a 18M04a 15N01	GREAT BASIN  Campito Mountain (CA) Chiatovich Flat (CA) Clark Canyon Montgomery Pass Pinchot Creek (CA) Piute Pass (CA) Trough Springs	32 8 1 4 28 33	5S 35E 2S 34E 9S 56E 1N 33E 1N 33E 4S 33E 8S 55E	19200 10500 9009 7109 9300 11700 8500		14M02a 15N07 15L01 15L03a	Pine Canyon Rainbow Canyon #2 White River #1 White River	23 6 31 31	6S 20S 13N 13N	69E 57E 59E 59E	6200 8100 7400 7440
NORTHER 19H01a 20H05 20H06S 18G06a 18H01SA 20H03a 20H11S 20H07 19H03P 19H02 19H04a 20H09P 20H10 17G05a 17H06a 20H04 18G05a	Bald Mountain Barber Creek (CA) Cedar Pass (CA) Oenio Creek (OR) Oisaster Peak Oismal Swamp (CA) Oismal Swamp 22 (CA) Eagle Peak (CA) 49 Mountain Hays Canyon Little Bally Mountain Mt. 81dwell (CA) North Star (CA) Oregon Canyon (OR) Quinn Ridge Reservation Creek (CA) Trout Creek (OR)	23 3 12 4 8 4 31 4 35 4 7 7 4 1 3 8 4 6 4 1 3 9 4 1 1 3 4	5N 21E 9N 16E 3N 14E 15 34E 7N 34E 8N 17E 0N 15E 2N 19E 9N 18E 9N 19E 19N 16E 0N 16E 0N 16E 10N 16	6720 6500 71100 6000 6500 7000 7050 7200 6000 6400 6000 7200 6200 7240 6300 5900 7800		SNOTEL has	4S Snow Course with SNOTEL 4A Snow Course and Aerial Marker	pitation urse, onl	· Gage y an Ae		

# WINTER SNOWPACK TAHOE, TRUCKEE, CARSON & WALKER BASINS CALIFORNIA - NEVADA



# WINTER SNOWPACK UPPER HUMBOLDT & SNAKE BASINS NEVADA



#### STREAMFLOW FORECASTS (Thousand Acre Feet) as af: May 1, 1983

Farecasts are based on snaw-water presently stared in the mauntain watersheds and the assumption that precipitation will be near average throughout the farecast period. Peak flow farecasts indicate the most probable range for the maximum average 24-hour flow. All averages are far 1963–77 period.

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
TRUCKEE RIVER  Little Truckee River above Boca, CA.  Truckee River at Farad, CA. 1/  Lake Tahoe Rise in Ft. (assuming gates closed)	Apr-July Apr-July April 1 to High	195 600 3.3	224 220 232	87 273 1.42
CARSON RIVER  E. Carson near Gardnerville, CA.  W. Carson at Woodfords, CA.  Carson River near Carson City, NV.  Carson River near Ft. Churchill, NV.	Apr-July Apr-July Apr-July Apr-July	380 110 430 415	209 208 235 249	187 53 183 167
WALKER RIVER  E. Walker near Bridgeport, CA. 2/ W. Walker below L. Walker nr. Coleville CA.  SNAKE RIVER	Apr-Aug. Apr-July	175 318	250 218	69 146
Owyhee River near Owyhee, NV. 3/ Owyhee River near Gold Crk., NV. 3/ Salmon Falls Crk. near San Jacinto, NV.	Apr-July Apr-July May-Sept.	155 45 79	194 200 125	80 22 <b>9</b> 5
HUMBOLDT RIVER Lamoille Creek near Lamoille, NV. S. Fork Humboldt above Dixie Crk., NV. Marys River above Hot Springs, NV. N. Fork Humboldt at Devils Gate, NV. Humboldt River at Palisade, NV. Humboldt River at Comus, NV. Martin Crk. near Paradise, NV.	Apr-July Apr-July Apr-July Apr-July Apr-July Apr-July Apr-July	35 125 65 70 500 400 45	125 169 176 200 226 225 300	28 73 37 35 221 175 15
NORTHERN GREAT BASIN  Bidwell Crk., near Ft. Bidwell, CA.  Mill Creek near Cedarville, CA.  Deep Creek near Cedarville, CA.  Eagle Creek near Eagleville, CA.	Apr-July Apr-July Apr-July Apr-July	20 7.0 6.0 7.0	167 171 167 163	12 4.1 3.6 4.3
COLORADO RIVER Virgin River at Littlefield, AZ.	May-June			29

NOTE: Streamflow forecasts which appear in this Bulletin are coordinated activity of the National Weather Service and the Soil Conservation Service.

2/ Observed flow plus change in storage in Bridgeport Reservoir.

 $\overline{3}$ / Observed flow plus change in storage in Wildhorse Reservoir.

<sup>1/</sup> Observed flow plus change in storage in Boca, Stampede, and Prosser Reservoirs Donner, Independence and Martis Creek Lake, and minus the flow at Truckee River at Tahoe City, California.

## RESERVOIR STORAGE (Thousand Acre Feet) AS OF May 1, 1983

•		Usable	Usable Storage				
Basin or Stream	RESERVOIR	Capacity	This Year	Last Year	Average		
Owyhee	Wild Horse	72	76	64	. 35		
Lower Humboldt	Rye Patch	194	168	114	135		
Colorado	Mohave	1,810	1,628	1,712	1,700		
Colorado	Mead	26,159	24,614	22,681	17,200		
Tahoe	Tahoe	745	509	628	513		
Truckee	Boca	41	10	32	30		
Truckee	Stampede**	222	228	199	129*		
Truckee	Prosser***	30	9	11	12*		
Carson	Lahontan	295	182	247	237		
West Walker	Topaz	59	- 17	37	42		
East Walker	Bridgeport	42	10	26	32		
* Adjusted average. ** Storage began August 1, 196				20	32		

#### TOTAL RESERVOIR STORAGE (Thousand Acre Feet)

MONTH	This Year	Last Year	Average +
October 1	1,172	358	786
January 1	1,070	688	844
February 1	1,114	804	920
March 1	1,089	935	968
April 1	1,079	1,047	1,010
May 1	972	1,148	1,024

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

	PEAK FLOW (SECOND FEET)				
FORECAST POINT	Forecast Range	Average +			
E. Fork Carson River nr. Gardnerville, NV. Carson River near Carson City, NV. Carson River near Ft. Churchill, NV. W. Walker R. below L. Walker R. nr Coleville CA	3100 - 3800 4300 - 5100 3600 - 4400 . 2900 - 3500	1,865 2,098 1,914 1,589			

#### FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/ Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
East Carson River nr. Gardnerville, NV.	200	Sept. 4	July 24
East Carson River nr. Gardnerville, NV.	500	Aug. 10	June 28

#### SATELLITE SNOW COVER

TAHOE-TRUCKEE, CARSON AND WALKER BASINS

APRIL 16, 1983

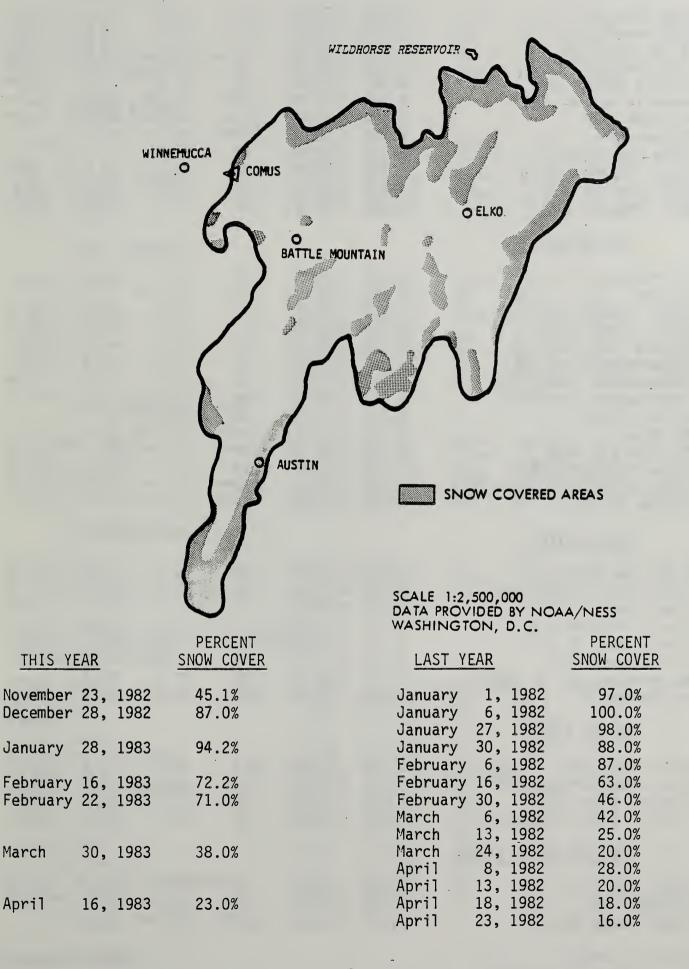


**PERCENT** PERCENT THIS YEAR SNOW COVER . LAST YEAR SNOW COVER BASIN 31, 1982 November 14, 1982 10.6% TAHOE-TRUCKEE January 48.0% February 24, 1982 December 28, 1982 50.0% 28.0% January 28, 1983 February 24, 1983 24, 1982 27, 1982 39.8% March 27.0% 38.0% April 24.0% March 30, 1983 38.0% April 32.0% 16, 1983 November 14, 1982 8.2% 31, 1982 CARSON January 48.0% 25.0% February 24, 1982 December 28, 1982 10.0% 28, 1983 19.2% 24, 1982 January March 12.0% February 24, 1983 19.0% April 27, 1982 11.0% 30, 1983 38.0% March 6.0% April 16, 1983 31, 1982 43.0% WALKER November 14, 1982 16.3% January December 28, 1982 46.0% February 24, 1982 20.0% 24, 1982 17.0% March 28, 1983 January 52.0% April 27, 1982 12.0% February 29, 1983 34.0% 30, 1983 29.0% March 16, 1983 25.0% April

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#### SATELLITE SNOW COVER HUMBOLDT RIVER ABOVE COMUS, NEVADA

APRIL 16, 1983



March

April

NOW COURSE MEASUREMENTS			THIS YEAR	Y	PAST R	
DRAINAGE BASIN and/or SNOW COURSE	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Conte	Average +
NAME	Elevation			<u> </u>	2231 1 423	Average .
LAKE TAHOE  Echo Peak (CA) Echo Summit (CA) Fallen Leaf (CA) Freel Bench (CA) Hagan's Meadow (CA) Heavenly Valley (CA) Marlette Lake Rubicon #2 Tahoe City Cross Upper Truckee (CA) Ward Creek #2 (CA) Ward Creek #3 (CA)	7,800 7,450 6,240 7,300 8,000 8,800 8,000 7,500 6,750 6,400 7,000 6,750	4/26/83 5/02/83 5/01/83 4/26/83 4/26/83 5/01/83 5/01/83 5/02/83 4/26/83 5/02/83 4/26/83	173 116 27 62 93 122** 118 154** 92 39 182 163	79.5 81.6 11.3 25.5 39.8 52.5** 48.2 66.1** 43.9 15.2 81.9 72.3	53.5 39.7 0.0 2.7 14.8 40.6 26.0 46.3	26.2  5.8* 12.3* 24.2* 20.6*  2.2* 38.8 37.9*
	0,,00	1, 20, 00	200	, 2, 0	00.0	07.5
TRUCKEE RIVER  Big Meadows CSS Lab Donner Summit (CA) Fordyce Lake (CA)b Furnace Flat (CA) Independence Camp (CA) Independence Creek (CA) Independence Lake (CA) Little Valley Mt. Rose Mt. Rose Ski Area Squaw Valley #2 (CA) Squaw Valley Gold Coast (CA) Truckee #2 (CA)	8,300 6,900 6,900 6,500 6,700 7,000 6,500 8,450 6,300 9,000 8,850 7,500 8,200 6,400	4/26/83 5/01/83 5/02/83 4/29/83 5/02/83 5/02/83 5/02/83 4/29/83 5/01/83 5/01/83 5/01/83 5/01/83 5/01/83	104 192** 169' 186 197 92 54 184 25 144** 194** 29 248** 65**	43.3 82.2** 80.8 92.9 106.7 39.9 24.3 76.7 9.7 64.6** 83.6** 104.2 114.3** 26.1**	31.3 45.7 47.4 60.6 22.6 9.3 71.1 61.6 76.4 77.7 87.5**	33.6* 38.1* 45.5 17.4* 6.6* 46.9*
CARSON RIVER						
Blue Lakes (CA)b Carson Pass, Upper (CA) Clear Creek Ebbetts Pass AM (CA) Ebbetts Pass #2 (CA) Spratt Creek (CA) Wet Meadows Lake AM (CA) Wet Meadows #2	8,000 8,600 7,300 8,700 8,700 6,100 8,050 8,050	5/03/83 4/26/83 4/29/83 AM BURIED 4/26/83 4/26/83 4/26/83 4/26/83	168 155 46 175 6 142 188	74.0 70.0 13.3 75.7 1.5 61.1 81.0	49.0 58.1  BURIED 67.5 0.0 43.7 57.8	33.7
WALKER RIVER						
Sonora Pass (CA) Sonora Pass Bridge (CA) Virginia Lakes (CA) Virginia Lakes Ridge (CA)	8,800 8,800 9,500 9,200	4/26/83 4/26/83 4/26/83 4/26/83	115 117 80 87	48.2 45.8 32.9 34.1	37.3 37.8 22.6 26.0	20.3 26.3 15.1* 16.0*
NORTHERN GREAT BASIN						
Cedar Pass (CA) Disaster Peak Dismal Swamp #2 (CA)	7,100 6,500 7,000	4/29/83 5/01/83 5/01/83	62 30** 106**	27.1 12.1** 45.4**	13.6 8.7 31.6**	15.2**
				+1	963-1977	period
	10					

SHOW COURSE MEASUREMENTS		THIS YEAR			PAST RECORD		
DRAINAGE BASIN and/or SNOW COURSE		Date	Snow Depth	Water Content	Water Cont	ent (inches)	
NAME .	Elevation	of Survey	(Inches)	(Inches)	Last Year	Average †	
SNAKE RIVER							
Bear Creek Goat Creek Pole Creek Ranger Station Seventy Six Creek	7,800 8,800 8,300 7,100	5/01/83 5/03/83 5/03/83 5/01/83	67** 68 68 34**	28.2** 26.8 28.8 14.1**	27.5 26.5 29.1 16.0	20.8a 20.9 23.6 3.2	
OWYHEE RIVER							
Big Bend Fawn Creek #2 Jack Creek #2, Upper Laurel Draw Taylor Canyon	6,700 7,050 7,250 6,700 6,200	5/01/83 5/01/83 5/01/83 5/01/83 5/01/83	20** 77** 75** 21**	8.4** 33.0** 32.4** 8.6**	8.3 20.9 22.4 5.6 0.0	2.4	
UPPER HUMBODLT							
Corral Canyon Dorsey Basin Green Mountain Lamoille #1 Lamoille #3 Lamoille #5	8,500 8,100 8,000 7,100 7,700 8,700	5/01/83 4/27/83 5/01/83 4/27/83 4/27/83 4/27/83	58** 55 51** 33 40 92	23.7** 22.3 21. ** 14.0 16.3 40.0	21.6 18.6 15.1 6.1 11.1 49.6	4.4* 8.3* 30.0*	
LOWER HUMBOLDT RIVER		•					
Big Creek Summit Buckskin, Lower Granite Peak Lamance Creek	8,700 6,700 7,800 6,000	5/01/83 5/01/83 5/01/83 5/01/83	98** 43** 88** <b>52</b> **	42.3** 17.8** 37.2** 21.9**	15.0** 7.4 26.8 4.8		
EASTERN NEVADA							
Berry Creek Ward Mountain #2 Hole-in-Mountain	9,100 7,400 7,900	•	75 70** 76	28.5 30.0** 34.3	15.7 <b>**</b> 14.6 <b>**</b>		
DESERT RESEARCH INSTITUTE MEASU TAHOE-TRUCKEE BASIN	UREMENT:						
Alder Creek Apollo Way Bennett Flat Davis Creek Evergreen Hills Road Galena Greek Henness Pass Junction Hobart Mills Incline Lake Jones Creek Mt. Rose Resort North Star Fire Department Reindeer Lodge	6,960 7,300 6,200 5,160 5,700 7,440 6,410 5,850 8,000 6,000 8,280 6,320 7,060	4/26/83 5/02/83 5/02/83 4/26/83 NO	T MEASUR 101 60 0 0 T MEASUR 62 21 136 0 157 20 56	42.4 28.2e 0.0 0.0	0.0 0.0 21.2 9.7 0.0 28.9 0.0 53.5		

SNOW COURSE MEASUREMENTS		THIS YEAR	PAST RECORD			
DRAINAGE BASIN and/or SNOW COURSE		Date	Snow Depth	Water Content	Water Content (inches)	
NAME	Elevation	of Survey	(Inches)	(Inches)	Last Year	Average +
DESERT RESEARCH INSTITUTE MEAS	SUREMENT (	(CONT.):				
RNR Test Site	6,400	4/26/83	29	12.4	0.0	
Sky Tavern	7,620	4/26/83	97	42.7	14.3	
Spooner Summit	7,620	5/02/83	65	30.6e	0.0	
Squaw Valley Fire Department	6,240	5/02/83	84	39.5e	10.2	
Tahoe City	6,240	5/02/83	60	28.2e	3.4	
Tahoe Meadows	8,540	5/03/83	196	95.8	69.7	
Tamarack Lake	8,820	NC	T MEASU	RED	64.4	
Third and Incline Creeks	6,235	4/26/83	5	1.0	0.0	
Thunder Cliff	6,200	5/02/83	60	28.2e	7.4	
Truckee Airport	5,900	5/02/83	0	0.0	0.0	
White Creeks	5,670	4/26/83	0	0.0	0.0	

All averages based on 1963-1977, 15 years period. Forecast period is April 1 through July 31 unless NOTE: otherwise noted.

Aerial Marker a

Located on adjacent basin b

Estimated e

Less than 15-year record SNOTEL provisional, depth estimated \*\*

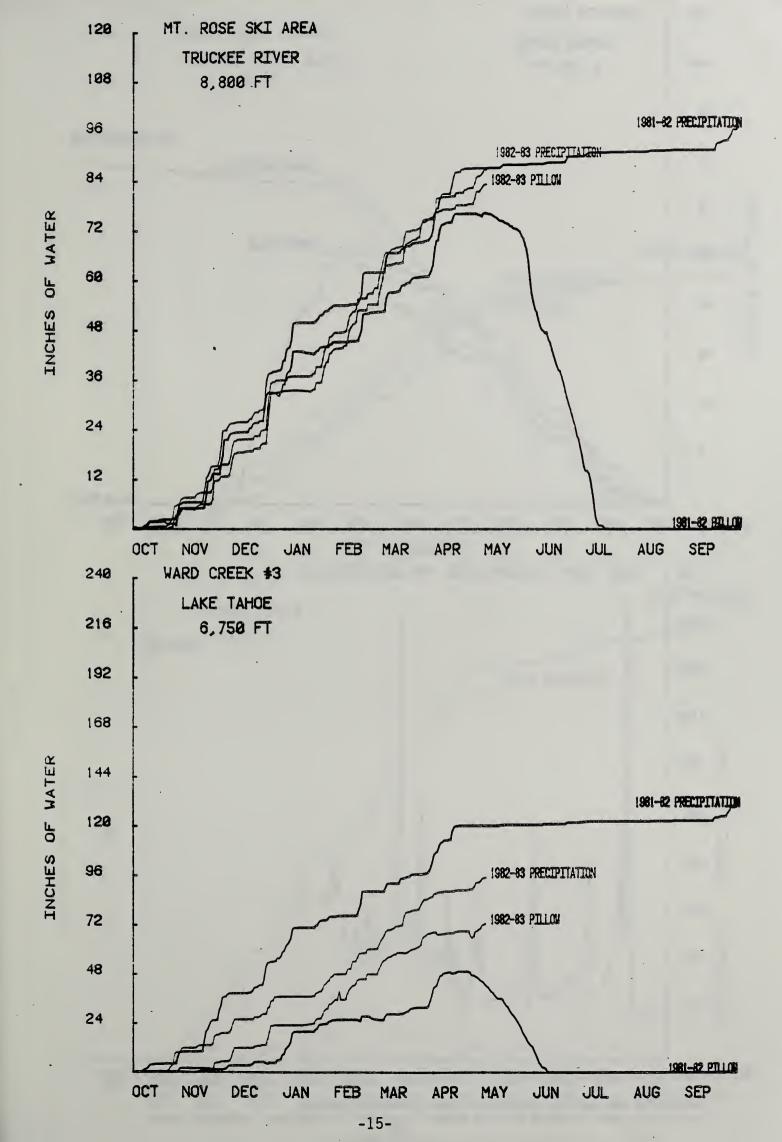
Not scheduled NS

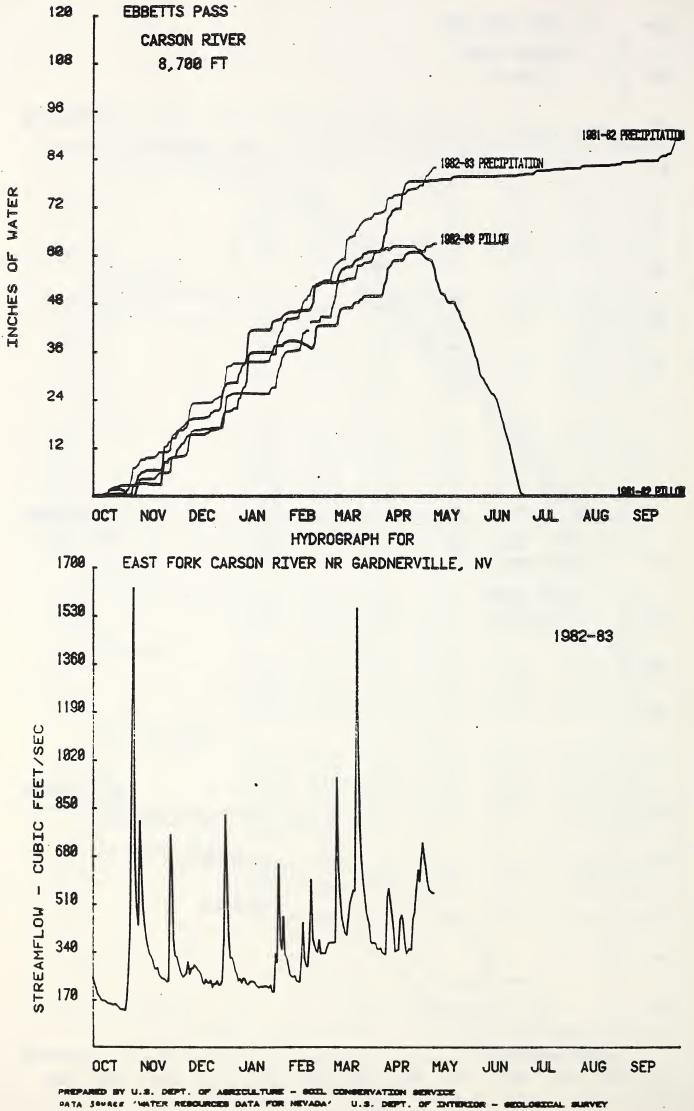
## PRECIPITATION (Inches)

ORAINAGE BASIN and		CURRE		TION	FROM O	CTOBER 1	O DATE
PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Last Year	This Year	Last Year	MAY 1 Average
TAHOE-TRUCKEE  Big Meadows  CSS Lab (CA)  Echo Peak (CA)  Fallen Leaf (CA)  Hagan's Meadow (CA)  Heavenly Valley (CA)  Independence Camp (CA)  Independence Creek (CA)  Independence Lake (CA)  Marlette Lake  Mt. Rose  Mt. Rose Ski Area  Rubicon #2  Squaw Valley Gold Coast (CA)  Tahoe City Cross (CA)  Truckee #2 (CA)  Ward Creek #3 (CA)	8,300 6,900 7,800 6,240 8,000 8,800 7,000 6,500 8,450 8,000 9,000 8,850 7,500 7,800 6,750 6,400 6,750	5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83	4.7 10.2 4.2 0.6 4.5 6.2 5.5 4.2 4.8 6.3 6.9 9.8 6.1 11.0 3.9 5.4 7.7	3.8  10.2 5.7 5.2 4.5 8.0 7.2 13.7 3.9 8.8 9.8 8.6 14.0e 7.0 6.0 11.0	48.9 92.2 81.7 45.6 38.9 49.2 50.2 50.6 67.5e 52.8 62.3e 86.9 61.3 77.3 50.2 48.5 95.3	48.7e  88.1e 55.7 48.1 45.4 65.0 61.1 76.2 49.6 49.8 87.3 72.0 120.9 64.7 59.2 118.5	53.4 10.4 23.5 38.1 35.1 20.2 50.1 24.9 29.7 42.6 35.9 62.3 21.9 17.7 61.1
CARSON-WALKER Blue Lakes (CA) Ebbetts Pass #2 (CA) Leavitt Headows (CA) Lobdell Lake (CA) Poison Flat (CA) Sonora Pass Bridge (CA) Spratt Creek (CA) Virginia Lakes Ridge (CA) Wet Meadows #2 (CA)	8,000 8,700 7,200 9,200 7,900 8,800 6,080 9,200 8,050	5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83	10.1 10.6 2.8 3.2 4.4 4.3 2.7e 3.3 10.5	7.4 10.6 4.9 3.0 5.9 6.5 3.2 5.1 8.0	73.1 82.0 42.6 37.4 47.4 55.8 48.1e 42.3 79.4	69.4 79.5 48.3 30.8 49.3 56.5 49.5 36.1 73.8e	40.3 49.6 29.7 20.7 21.8 32.4 27.6 22.0 38.0
HUMBOLDT Big Creek Summit Buckskin, Lower Corral Canyon Dorsey Basin Granite Peak Green Mountain Lamance Creek Lamoille #3	8,700 6,700 8,500 8,100 7,800 8,000 6,000 7,700	5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83	3.7 3.2 4.0 4.1  3.7 2.8 4.2	1.2 2.6 2.3 1.8 3.3 1.9 2.5	29.4 25.9 27.6 31.3  29.2 30.1 26.8	18.2 26.4 26.2 30.4 50.5e 28.1 31.1 28.5	16.5 14.9 22.3 19.6 19.5 18.1 13.8 22.4
SNAKE-OWYHEE  Bear Creek  Big Bend  Fawn Creek #2  Goat Creek  Jack Creek #2, Upper  Jacks Peak  Laurel Draw  Pole Creek Ranger Station  Seventy Six Creek  Taylor Canyon	7,800 6,700 7,000 8,800 7,250 8,420 6,700 8,330 7,100 6,200	5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83 5/1/83	3.8 1.5 3.8 4.5 2.0 3.1 2.2 2.5 1.6 1.4	2.6 1.3 3.4 2.0 2.3 2.8 2.4 1.2 1.3 0.8	29.3 14.6 31.6 32.3 25.9 39.1 22.3 16.6 18.3 8.6	34.3 18.7 34.4 33.8 33.8e 42.1 28.3 19.9 21.8 12.2	23.4 15.1 28.7 23.6 20.0  18.4 16.9 16.3 8.9
EASTERN NEVADA Berry Creek Hole-in-Mountain Ward Mountain	9,100 7,900 8,900	5/1/83 5/1/83 5/1/83	5.1 3.8	2.0 4.8 1.9	24.3 27.8 25.4	23.6 41.8 24.5	23.0
NORTHERN GREAT BASIN Cedar Pass (CA) Disaster Peak Dismal Swamp #2 (CA)	7,100 6,500 7,050	5/1/83 5/1/83 5/1/83	3.7 2.3 6.8	2.9 0.9 6.3	3 <b>6.7</b> 26.1 56.8	37.8 24.6 58.9	28.2 - 16.6 - 56.1
All Data SNOTEL Provisiona	1						

PRECIPITATION (Inches) NATIONAL WEATHER SERVICE, RENO, NEVÁDA - MAY, 1983

DRAINAGE BASIN and	ELEVATION	The second second	Last Year		OCTOBER This Year	1 TO DATE	***1
PRECIPITATION GAGE LOCATION		Precip.	Last lear	-NOIMAL	Inis rear	Last lear	NOTHAL
TRUCKEE-TAHOE		_					
Boca	5,575	2.67	2.97	1.56	36.96	34.63	19.13
Glenbrook	6,350	2.16	2.05	1.16	28.70	29.0 <b>0</b>	15.68
Incline Village	6,550	3.82	3.13	1.29	36.71	39.00	19.23
Reno	4,404	1.35	. 34	.47	11.36	6.91	5.43
Sierraville	4,975	2.70	3.14	1.70	41.58	47.62	24.34
Tahoe City	6,230	2.58	6.71	2.33	45.57	61.21	30.08
Truckee Ranger Station CARSON-WALKER	5,995	4.04	5.93	2.45	42.72	51.63	29.58
Bridgeport Ranger Station	6,560	0.80	1.55	.46	15.03	8.55	9.39
Carson City	4,651	0.82	1.41	.54	16.57	14.18	9.68
Fallon Experiment Station	3,965	. 84	.05	.33	6.58	2.91	2.92
Hawthorne	4,215	0.87	.66	.51	3.53	2.06	2.70
Minden	4,720	1.22	1.58	.47	4	9.45	6.64
Twin Lakes	7,829	5.89	9.64	4.64	53.80	68.67	45.22
	5,971	2.25	3.05	1.25	33.94	30.80	17.74
Woodfords		2.12	2.12	.34	6.70	3.44	3.37
Yerington HUMBOLDT	4,375		2.12	. 34	6.70	3.44	3.37
Austin	6,605	2.93	. 67	1.47	12.81	9.80	7.73
Battle Mountain	4,530	1.14	.30	. 76	5.10	2.38	4.71
Deeth	5,338	1.75	.44	. 93	12.56	10.10	5.82
E1 ko	5,075	1.28	.50	. 82	10.01	8.33	6.38
Emigrant Pass	5,755	1.38	.38	1.08	11.27	9.13	8.22
Jiggs	5,760	1.13	.66	1.35	11.19	7.76	7.41
Lamoille	5,800	١.06	1.21	2.53		11.07	12.36
Lovelock FAA	3,900	.39	.30	. 36	5.86	4.19	2.96
	6,600	.58	* .50	. 86	* 3.00	*	6.02
North Fork	4,675	1.58	.12	.59	11.90	11.36	6.74
Paradise Valley	. 4,675						
Wells	5,650	1.35	1.30	.94	8.49	10.10	6.66
Winnemucca SNAKE-OWYHEE	4,301	.82	.29	.73	7.56	6.24	5.78
Contact	5,365	1.18	.53	.64	5.87	7.83	4.65
Mountain City	5,620	1.36	.94	*	8.69	9.73	*
Owyhee .	6,491	1.74	.78	1.50	10.94	10.33	9.40
Tuscarora	6,170	1.52	1.09	1.36	13.59	15.35	10.00
EASTERN NEVADA		1.34		1.33		14.99	10.01
Arthur	6,280		.97	1.00	8.15	8.26	5.06
Ely	6,253	1.46	.72				
Montello	4,880	.60	. 27	.54	5.80	5.30	3.54
Pequop	6,030	1.87	. 90	*	11.70	11.70	*
Ruby Lake NORTHERN GREAT BASIN	6,012	1.52	. 79	1.17	11.44	12.52	8.57
	4 400						
Alturas Ranger Station	4,400	1.63	.45	1.00	11.89	10.68	9.41
Cedarville	4,670	1.50	.78	.97	10.93	14.66	11.01
Ft. Bidwell	4,498	1.69	1.28	1.04	17.98	18.91	12.25
Orovada	4,310	3.33	.50	1.12	10.66	8.73	7.47
Susanville CENTRAL GREAT BASIN	4,148	1.37	1.78	.73	18.87	18.07	12.25
Tonopah LOWER COLORADO RIVER	5,426	. 85	.26	.32	6.97	3.73	2.19
	4 400		25	0.4		1 05	5 63
Caliente	4,402	1.72	.25	. 84	9.23	1.85	5.61
Las Vegas	2,162	.45	.01	.27	3.48	1.93	2.37
Pioche	6,165	1.37	.61	1.34	13.65	7.23	8.95
Bishop	4,118	. 22	1.62	.41	8.75	5.07	4.99
* Not Available							
T Trace							
Normals are for 30 year							
period of 1941-1970.							





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